

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented): A method for intercepting data exchanged by remote terminals via a communications network, said data including control packets formatted according to a first real-time data transfer control protocol and associated with data previously exchanged by said terminals, the method comprising:

intercepting at least certain data packets of a transfer between at least two remote terminals, during said transfer, so as to determine which of said data packets are control packets, said control packets being formatted according to said first protocol;

duplicating at least part of each of said control packets; and

communicating data representing said duplicated part of each of said control packets to a control application located in said network, said control application deducing information on said transfer from said communicated data.

2. (Previously Presented): The method according to Claim 1, wherein all the control packets of said transfer between at least two remote terminals are intercepted.

3. (Previously Presented): The method according to Claim 1, wherein the control packets are sampled so as to intercept only one sample from amongst n , n being a chosen integer value.

4. (Previously Presented): The method according to Claim 1, wherein determination of the formatting according to the first protocol concerns the determination, amongst the packets, of those in which at least a network address field for the terminal which sent the packet, a network address field for the destination terminal of the packet, a destination port field and/or a source port field, and a protocol number field have chosen values.

5. (Previously Presented): The method according to Claim 4, wherein said chosen values are communicated by an application and/or an item of equipment in the network.

6. (Currently Amended): The method according to Claim 1, further comprising:
between said intercepting and said duplicating, performing a comparison between a chosen threshold value and the value of a service information field contained in the intercepted control packet;

wherein said duplicating comprises duplicating only the part of the control packet in which the service information field has a value ~~substantially~~ greater than said chosen threshold value.

7. (Currently Amended): The method according to Claim 1, further comprising:
between said intercepting and said duplicating, performing a comparison between a chosen threshold value and the value of a service information field contained in the intercepted control packet;

wherein the whole of each intercepted control packet, formatted according to the first protocol and in which the service information field has a value ~~substantially~~ greater than said

chosen threshold value, is duplicated, and the whole of said duplicated control packet is communicated.

8. (Currently Amended): The method according to Claim 6, further comprising:
between said intercepting and said duplicating, performing a comparison between a chosen threshold value and the value of a service information field contained in the intercepted control packet;

wherein certain chosen fields contained in each intercepted control packet, formatted according to the first protocol and in which the service information field has a value ~~substantially~~ greater than said chosen threshold value, are duplicated, and said duplicated chosen fields are communicated.

9. (Previously Presented): The method according to Claim 8, wherein one of the duplicated and communicated chosen fields is said service information field.

10. (Previously Presented): The method according to Claim 8, wherein said service information field is also duplicated, and information data representing said duplicated service information field are communicated with said duplicated chosen fields.

11. (Previously Presented): The method according to Claim 1, wherein certain chosen fields contained in each intercepted control packet, formatted according to the first protocol, including at least a service information field, are duplicated.

12. (Previously Presented): The method according to Claim 11, wherein information data representing said duplicated service information field are communicated with the other duplicated fields.

13. (Previously Presented): The method according to Claim 6, wherein the service information field comprises data representing a quality of service.

14. (Currently Amended): The method according to Claim 4 , wherein:
certain chosen fields contained in each intercepted control packet, formatted according to the first protocol and in which the service information field has a value ~~substantially~~ greater than the said threshold value, are duplicated, and said duplicated fields are communicated; and
said detected network address field for the terminal which sent the packet, said detected network address field for the destination terminal of the packet, said detected destination port field, and said detected protocol number field are duplicated.

15. (Previously Presented): The method according to Claim 1, wherein the whole of each intercepted control packet, formatted according to the first protocol, is duplicated.

16. (Previously Presented): A device for intercepting data exchanged by remote terminals, via a communications network, said data including packets formatted according to a first real-time data transfer control protocol and associated with data previously exchanged by said terminals, the device comprising:

interception means for intercepting at least certain data packets of a transfer between at least two remote terminals, during said transfer, and for determining amongst the intercepted data packets which of said data packets are control packets, said control packets being formatted according to said first protocol; and

management means for duplicating at least part of each of said intercepted control packets, and for generating data representing said duplicated part of each of said control packets, intended to be communicated to control means located in a control application of said network.

17. (Previously Presented): The device according to Claim 16, wherein said interception means intercept all control packets transferred.

18. (Previously Presented): The device according to Claim 17, wherein said interception means sample the control packets in the process of being transferred, and intercept only one sample from amongst n , n being a chosen integer value.

19. (Previously Presented): The device according to Claim 16, wherein said interception means

detect from amongst the packets those in which at least a network address field for the terminal which sent the packet, a network address field for the destination terminal of the packet, a destination port field and/or a source port field, and a protocol number field have chosen values; and

retain the packets having said chosen values, these packets then being referred to as intercepted control packets.

20. (Previously Presented): The device according to Claim 19, wherein said interception means are organized for receiving said chosen values from at least one of an application and an item of equipment in the network.

21. (Currently Amended): The device according to Claim 16, wherein said interception means are organized for detecting a service information field contained in each intercepted control packet, and for performing, between interception and duplication, a comparison between a stored chosen threshold value and the value of the detected service information field, so that the management means duplicate only the part at least of the control packet in which the service information field has a value ~~substantially~~ greater than said threshold value.

22. (Currently Amended): The device according to Claim 21, wherein said interception means are organized for communicating to said management means the whole of each intercepted control packet in which the service information field has a value ~~substantially~~ greater than said threshold value, and said management means are organized for duplicating the whole of each intercepted control packet received, and communicating to said control means the whole of said duplicated control packet.

23. (Currently Amended): The device according to Claim 21, wherein said interception means are organized for communicating to said management means certain chosen fields contained in each intercepted control packet in which the service information field has a

value ~~substantially~~ greater than said threshold value, and said management means are organized for duplicating said chosen fields of each intercepted control packet received and communicating said duplicated fields to said control means.

24. (Previously Presented): The device according to Claim 23, wherein one of the duplicated and communicated fields is said service information field.

25. (Previously Presented): The device according to Claim 23, wherein said interception means are organized for communicating said service information field to said management means, and said management means are organized for duplicating said service information field and communicating, with other duplicated fields, information data representing said duplicated service information field.

26. (Previously Presented): The device according to Claim 16, wherein said management means are organized for duplicating certain chosen fields contained in each intercepted control packet, formatted according to the first protocol, including at least a service information field.

27. (Previously Presented): The device according to Claim 23, wherein said management means are organized for communicating information data, representing the said duplicated service information field, in addition to other duplicated fields.

28. (Previously Presented): The device according to Claim 21, wherein the service information field comprises data representing the quality of service.

29. (Currently Amended): The device according to Claim 19, wherein said interception means are organized for detecting a service information field contained in each intercepted control packet, and for performing, between interception and duplication, a comparison between a stored chosen threshold value and the value of the detected service information field, so that the management means duplicate only the part at least of the control packet in which the service information field has a value ~~substantially~~ greater than the said threshold value; and

said management means are organized for duplicating said network address field for the terminal which sent the intercepted packet, said network address field for the destination terminal of the intercepted control packet, said destination port field and said protocol number field, and for communicating said duplicated fields to the control means.

30. (Previously Presented): The device according to Claim 16, wherein said management means are organized for duplicating the whole of each intercepted control packet, formatted according to the first protocol, and for communicating to said control means the whole of the said duplicated control packet.

31. (Previously Presented): The device according to Claim 16, wherein said interception means are located in at least one of the items of network equipment through which the streams intended for the said terminals flow.

32. (Previously Presented): The device according to Claim 16, wherein said management means are located in at least one of the items of equipment in the network to which the said terminals are connected.

33. (Previously Presented): The device according to Claim 31, wherein the network equipment is chosen from a group comprising routers, NAT boxes, firewalls and traffic shapers.

34. (Previously Presented): The device according to claim 16, wherein said network is at least one of a public and a private network.

35. (Previously Presented): The device according to Claim 34, wherein said network is the Internet.

36. (Previously Presented): The device according to Claim 34, wherein the first protocol is called RTCP, and is associated with a real-time data transfer protocol called RTP.

37. (Previously Presented): The device according to Claim 34, wherein the duplicated data are communicated according to a protocol chosen from a group comprising the COPS and SNMP protocols, and encapsulation protocols.